

## SECTOR 2 — CHART INFORMATION

## SECTOR 2

### HARO STRAIT AND ADJACENT CHANNELS

**Plan.**—This sector describes Haro Strait and the adjacent channels to the W. Generally, the descriptive sequence is from S to N.

#### General Remarks

**2.1** Haro Strait is the westernmost and more frequented of the three main channels leading from the E end of the Strait of Juan de Fuca to the SE end of the Strait of Georgia. From its S entrance, between Discovery Island and Eagle Point, the strait leads N for 17 miles. In the vicinity of Turn Point, the strait bends sharply ENE for about 12 miles and joins the Strait of Georgia at Boundary Pass.

Vessels navigating the strait and wishing to anchor should enter Plumper Sound, which is sheltered and easily accessible.

San Juan Channel and Rosario Strait, the other two main channels leading N from the Strait of Juan de Fuca and Puget Sound, are described in U.S. Coast Pilot 7, Pacific Coast.

The channels to the W of Haro Strait lead through several of the Gulf Islands that fringe the SE end of Vancouver Island as far as the Strait of Georgia. Local coastal and low-powered vessels frequent these channels, some of which require local knowledge to transit.

The tidal currents are much weaker in these passages and sheltered anchorages are more prevalent than in the main channels. The shortest principal route, used by ships in transit between Victoria Harbor and Vancouver Harbor, leads through Sidney Channel, Moresby Passage, and Active Pass.

**Winds—Weather.**—The weather in the vicinity of Haro Strait is variable. The wind direction and strength are influenced greatly by the topography. Winds from the W blowing into the Strait of Juan de Fuca are deflected to the SW into Rosario Strait and Haro Strait.

The summers are warm, but not hot, and there is a long transition period between seasons. The prevailing W winds and cool sea breezes make the summers comfortable. Generally, the relative humidity is high as the area is exposed to W weather. The precipitation is less on the E coast of Vancouver Island, with the SE shores being the driest. The precipitation is not heavy, but frequent. Snowfall occurs between December and March. The entire area is always cloudy. In the fall, radiation fog and smoke are prevalent.

**Tides—Currents.**—Off Turn Point, the flood current varies in direction, sometimes setting 037° towards the E end of South Pender Island and frequently setting E towards Orcas Island.

In a position bearing 037° and 1.3 miles distant from Turn Point, the ebb current begins promptly and for the first hour sets 285°. When the velocity of this current increases, its direction almost always becomes 263°. The ebb current increases in velocity when the range of tide is great and decreases when the range of tide is small.

Off Skipjack Island and between it and Patos Island, heavy tide rips and eddies are formed, especially with an adverse

wind. The tide rips are generally heaviest when a S current runs. The tidal currents at times run at 2 to 5 knots to the N of Skipjack Island.

In the channel leading between Patos Island and the Sucia Islands, the tidal currents are weaker, more regular, and set more fairly through the passage than they do in Boundary Pass. In addition, this channel is almost free of tide rips.

In a position bearing 159° and 1.5 miles distant from East Point, the flood current, during the first hour, sets about 015°, but changes its direction to 071° about 4 hours after LW at Turn Point. At this time it attains the maximum velocity of 3 knots. The ebb current first sets about 195°, but changes its direction to 217° about 3.5 hours after HW slack at Turn Point. At this time it attains the maximum velocity of 5 knots. The duration of slack water is 10 to 12 minutes. The ebb current runs in rushes and surges, forming whirlpools and eddies, whereas the flood flows more evenly.

In a position bearing 037° and 1.8 miles distant from Seabird Point, there is a distinct flood current. This current usually sets NNW for 2 or 3 hours and may run at 2 to 2.5 knots. Nearer the middle of Haro Strait there is considerably more flood current and it may run at a greater velocity for as long as 4 to 6 hours. The flood current sets strongly towards the S shore of San Juan Island.

In the same position off Seabird Point, the ebb current may continue for 12 to 16 hours. Although the time of its beginning varies, the ebb current usually begins within an hour on either side of HW at Victoria. The first of the ebb current often sets WSW towards Discovery Island, but, when running at strength, the direction varies between SSE and S. The ebb current usually attains its maximum velocity shortly after LW, but, at times, this velocity may occur in the middle of the falling tide. The ebb current frequently runs at 3 to 3.5 knots and at times at 5 knots. The greatest velocity occurs at the end of a large fall in the tide to LLW.

In the middle of the S entrance of Haro Strait, the maximum ebb current velocity occurs about 1 hour 15 minutes before LW at Victoria. The flood current usually begins about 3 hours 30 minutes after LW at Victoria.

At Kellett Bluff, the strongest tidal currents set 004° and 172°. The maximum velocity is attained by the ebb current and may be as much as 2.5 to 3 knots.

In Spieden Channel, the flood tidal currents, which set E from Haro Strait and W from San Juan Channel, meet and cause heavy races and eddies in places.

**Regulations.**—A Traffic Separation Scheme (TSS), which may best be seen on the chart, lies in the S approach to Haro Strait, close E of Discovery Island. The principal shipping route follows this TSS into the strait, then through Boundary Pass.

A Traffic Separation Scheme (TSS), which may be entered 6 miles E of Discovery Island, leads SE and passes NE of Hein Bank. This separation scheme, situated in U.S. waters, leads into the mandatory Puget Sound Vessel Traffic Service.



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### Seabird Point Light

For further information concerning the latter TSS, see U.S. Coast Pilot 7, Pacific Coast.

For further information concerning the Vessel Traffic Service, see Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia.

A Special Operating Area (SOA) has been established near Turn Point and consists of the waters bound by a line from Turn Point Light to position 48°42.4'N, 123°14.0'W to Arachne Reef Light to Tom Point Light.

Operational procedures for all VTS participants approaching the SOA from Haro Strait heading N for Boundry Pass or Swanson Channel, or vessels heading S for Haro Strait from Boundry Pass, but not from Swanson Channel are, as follows:

1. If towing astern and a VTS participant, use a hawser with a length as short as possible, but maintaining safety and good seamanship.
2. If a VTS participant of 100m in length or more, make all efforts to be consistent with safety and industry practices:
  - a. Do not enter the SOA when another VTS participant of 100m in length or more is already in transit, unless following astern or on a similar course.
  - b. If following astern of another vessel, maintain a minimum distance of 0.5 mile.
  - c. Maintain a distance of at least 0.3 mile off Turn Point.

The following are reporting points:

1. All vessels heading N participating in the VTS must report to Victoria Traffic at Reporting Point 4 and Reporting Point 5, and heading S at Reporting Point 7. Victoria Traffic will provide the necessary information regarding traffic advisories for Reporting Point 6.
2. All vessels participating in the VTS must report to Victoria Traffic at Reporting Point 6. Victoria Traffic will then provide any traffic advisory information for the SOA and the next reporting point. Traffic Advisories will include

any opposing vessel's names, ETA for Turn Point, and vessel's speed.

3. All vessels participating in the SOA must communicate, on VHF channel 11, their navigational intentions, any information that is necessary to comply with these standards and/or make arrangements to safely pass other vessels within or near the SOA. All actions are expected to be taken by reaching Reporting Point 6, but it is recommended to take action before reaching this point; if heading N by Lime Kiln Light or Kellett Bluff Light, if heading S by Monarch Head or Blunden Islet.

The waters described in this sector lie within the Vancouver Vessel Traffic Services (VTS) System. For further information on reporting requirements, see [paragraph 1.1](#).

**Caution.**—The fairway through Haro Strait is free of dangers. However, two shoal patches, with depths of 12.8m and 14.6m, lie near the middle of the S entrance. During stormy weather, tide rips mark these patches.

A shoal patch, with a depth of 11m, lies close to the fairway leading through Boundary Pass. It is marked by tide rips during stormy weather. In addition, several above and below-water reefs lie about 0.8 mile outside the limits of the fairway.

The fairways leading through the Gulf Islands are constricted by rocky shoals which extend from the various islands bordering the channels. In addition, several detached rocks lie in and close to the fairways.

Although transit of Haro Strait is not difficult, the velocity and direction of the tidal currents vary and care should be exercised while enroute. Strong tide rips and eddies occur off Kellett Bluff, off Turn Point, and between East Point and Alden Point.

Pleasure craft are encountered in large numbers throughout the area described in this sector. In addition, commercial and sport fishing craft may congregate near the entrances to narrow passages and off the prominent headlands.

## Haro Strait—Boundary Pass

**2.2 Seabird Point** (48°25'N., 123°13'W.), the E extremity of Discovery Island, forms the SW entrance point of Haro Strait. Pandora Hill rises close W of this point. A light is shown from a structure, 10m high, standing on the point.

The E side of Haro Strait is steep-to, but several reefs lie rather close to the W side of the channel leading through this passage. The depths in the fairway are ample for most ocean-going ships. The least depths of 12.8m and 14.6m lie in the fairway to the NNE and NE of Seabird Point.

**Middle Bank** (48°25'N., 123°06'W.), a rocky patch, lies in the S approach to Haro Strait and has depths of 19.8 to 49m.

The **Chatham Islands** (48°26'N., 123°14'W.) lie on foul ground extending NW from Discovery Island as far as Baynes Channel. They are low, wooded, and rocky. The easternmost island can be identified by three prominent radio towers standing in line.

Beaumont Shoal, with a depth of 17.1m, lies about 2.5 miles NE of Seabird Point. A lighted buoy is moored on this shoal and marks the approach (separation zone) for the Haro Strait.

**2.3 San Juan Island** (48°32'N., 123°05'W.), forming the E side of the entrance of Haro Strait, is rugged and partly

wooded. The W side of the island in the vicinity of Eagle Point is steep-to and rocky.

Mount Dallas, standing 1.5 miles SE of **Bellevue Point** (48°32'N., 123°10'W.), is 329m high and forms the summit of the island.

**Cattle Point** (48°27'N., 122°58'W.), marked by a light, is the S extremity of San Juan Island.

**Kellett Bluff** (48°35'N., 123°12'W.), the SW extremity of **Henry Island** (48°36'N., 123°11'W.), forms a conspicuous landmark for vessels in Haro Strait. A light is shown from a structure standing close N of this bluff. The NW coast of Henry Island is steep-to and Battleship Islet, 9m high, lies 0.3 mile NW of it.

**Kelp Reefs** (48°33'N., 123°14'W.), above and below-water, lie on the W side of the channel, about 3 miles SSW of Kellett Bluff. These reefs are marked on the E side by a light shown from a tower with a radar reflector. Unit Rocks, partly drying, and Little D'arcy Island lie on foul ground extending NNW from Kelp Reefs.

**Gooch Island** (48°40'N., 123°17'W.) lies 7.3 miles NNW of Kelp Reefs. A conspicuous red and white watchtower stands on the NW extremity of this island, with a house situated close beside it.

Rum Island lies close E of the E extremity of Gooch Island. A light is shown from a structure standing on Tom Point, the E extremity of this island.

North Cod Reef and South Cod Reef, which both dry, lie close S of the W extremity of Gooch Island. They are marked by a lighted buoy moored about 1.5 miles SW of Rum Island.

Mandarte Island, lying 1.8 miles S of Gooch Island, is bare, except for a few stunted trees standing on its NW end. A lighted buoy is moored about 0.8 mile SE of this island and marks the shoals extending from its SE end. A light is shown from a structure standing on an islet lying 0.3 mile NW of the NW extremity of the island.

**Caution.**—A wreck, marked by buoys, lies close N of Gooch Island. This wreck serves as an artificial reef for divers.

A local magnetic disturbance has been observed to exist in the vicinity of Bellevue Point.

**2.4 Halibut Island** (48°37'N., 123°16'W.), lying 2.5 miles S of Rum Island, is encircled by rocky shoal patches. A patch, with a least depth of 5m, lies about 1 mile W of the fairway, 0.5 mile SE of the SE extremity of the island.

**Sidney Island** (48°36'N., 123°17'W.) lies with its SE extremity located 1.8 miles S of Halibut Island. This island has prominent white cliffs and banks extending along its S side. The summit, 87m high, rises at N end of the island and a radio tower stands close to it.

Miners Channel leads NW from Haro Strait, between Sidney Island and Halibut Island. Anchorage can be taken, out of the current, in a depth of 16.5m, within this channel and NW of Halibut Island.

Hughes Passage, a deep but constricted channel, links Haro Strait and Sidney Channel, close S of Sidney Island. Local knowledge is necessary for transiting this passage.

**Spieden Channel** (48°38'N., 123°08'W.), entered NE of Henry Island and N of San Juan Island, connects Haro Strait and San Juan Channel. This deep, navigable channel is subject

to strong tide rips and eddies. Several shoals lie in the W entrance to the channel and are marked by buoys.

Cooper Reef and Arachne Reef, two drying reefs, lie 0.5 mile N and 1.5 miles NW, respectively, of Rum Island. A shoal patch, with a depth of 9.5m, lies about 0.5 mile NE of Arachne Reef. A light is shown from a structure standing on Arachne Reef.

**Turn Point** (48°41'N., 123°14'W.), the NW extremity of Stuart Island, is a bold, steep-to bluff. A light is shown from a structure standing on this point; a prominent white building, with a red roof, is situated close SE of it. Stuart Island is wooded; two conspicuous hills rise near its center.

**2.5 Reid Harbor** (48°40'N., 123°11'W.), indenting the SE side of Stuart Island, affords sheltered anchorage, in a depth of 8m, mud.

**Prevost Harbor** (48°41'N., 123°12'W.), lying at the N side of the island, provides sheltered anchorage, in depths of 11 to 13m, mud, close within the entrance. Details of the harbor facilities are given in U.S. Coast Pilot 7, Pacific Coast.

**Moresby Island** (48°43'N., 123°18'W.) and South Pender Island lie on the NW side of Haro Strait. Both of these islands have conspicuous hills rising at their S and NW ends.

Several above and below-water rocks, lying about 1 mile from the fairway in Haro Strait, fringe the shore of South Pender Island. Blunden Islet, lying near the E end of South Pender Island, is fronted by foul ground on its E side. A light is shown from a tower standing on the bare rocks, close SE of the S extremity of Moresby Island. Gowlland Point, marked by a light, is located at the E end of South Pender Island, about 0.8 mile SW of Blunden Islet.

**Caution.**—A cable area crosses the fairway of Spieden Channel, between Spieden Island and Davison Head.

Strong tide rips often occur in the vicinity Blunden Islet.

**Bedwell Harbor** (48°45'N., 123°15'W.), an inlet, is entered between **Wallace Point** (48°44'N., 123°14'W.) and Tilly Point, the SW extremity of South Pender Island. Hay Point, marked by a light, is located on the E side of the entrance, 1.3 miles NW of Tilly Point.

The harbor is used mainly by small craft and its facilities are solely for such vessels. Skull Islet, marked by a beacon, lies on a reef close off the N shore of the harbor. Anchorage is available, in depths of 13 to 15m, mud, about 0.2 mile SE of this islet.

**Caution.**—An abandoned submarine cable crosses the harbor close W of Hay Point.

A seaplane landing area is situated within the harbor.

**2.6 Waldron Island** (48°42'N., 123°02'W.), located 6.5 miles E of Turn Point, is indented to the SW by Cowlitz Bay. Anchorage during fair weather can be taken, in depths of 7 to 11m, within this bay.

**Skipjack Island** (48°44'N., 123°02'W.), marked by a light, lies about 1 mile N of Waldron Island and 1.8 miles SE of the fairway passing through Haro Strait. The tidal currents are strong in the vicinity of this island.

The **Sucia Islands** (48°45'N., 123°55'W.) lie about 5 miles NE of Skipjack Island. The largest of these islands encloses Echo Bay, which affords good anchorage, in depths of 7 to 9m,



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### East Point Light

mud, sheltered from W winds. Clements Reef, along with several drying rocks, extends NW from the NE island of the group. A beacon stands at the E extremity of the foul ground that extends ESE from the N part of the group.

**West Bank** (48°45'N., 122°57'W.), with a depth of 2.3m, lies about 1.5 miles W of the largest of the Sucia Islands. Several shoal patches, with depths of less than 11m, lie in the vicinity of this bank. The passage leading between the bank and the island is not recommended.

**2.7 Boundary Pass** (48°47'N., 123°00'W.) lies between Saturna Island and Patos Island, at the N end of Haro Strait. It is the widest and most used passage leading into the Strait of Georgia.

**Monarch Head** (48°46'N., 123°05'W.), the SE extremity of Saturna Island, is bold and rocky. This high, cliffy headland is located less than 1 mile NW of the fairway passing through Boundary Pass. The coast of the island between Monarch Head and Taylor Point, about 1.5 miles W, is formed of steep, rocky cliffs. The Java Islets lie on foul ground which extends about 1 mile E of Taylor Point. Narvaez Bay, lying NE of Monarch Head, is open to the E and is not recommended for anchorage.

A conspicuous television tower, 62m high, stands near the summit of Mount Warburton Pike, about 1.8 miles WNW of Taylor Point.

**East Point** (48°47'N., 123°03'W.), marked by a light, forms the E extremity of Saturna Island and is located 0.8 mile NW of the fairway passing through Boundary Pass. Strong tide rips and eddies prevail in the vicinity of this point.

**Tumbo Island** (48°48'N., 123°03'W.), with Tumbo Point forming its E extremity, lies about 0.5 mile NW of East Point and is separated from Saturna Island by a deep channel.

**2.8 Rosenfeld Rock** (48°48'N., 123°02'W.), marked by kelp, has a least depth of 2.4m and lies about 1.5 miles NNE of East Point. A lighted buoy, equipped with a racon, is moored about 0.5 mile E of this rock. The rocky shoals and below-water rocks fronting East Point, Tumbo Island, and Rosenfeld Rock are all covered by kelp.

A detached reef, with a depth of 11m, lies about 1.8 miles SE of East Point. Vessels should pass to the NW of the lighted buoy marking this reef.

**Alden Point** (48°48'N., 122°58'W.), marked by a light, is the W extremity of Patos Island, which forms the E side of Boundary Pass. Active Cove lies close S of this point and affords anchorage in a depth of 4m to small vessels with local knowledge.

**Tides—Currents.**—The main volume of the flood tidal current runs N from the Strait of Juan de Fuca to the Strait of Georgia, through the E channels connecting the two straits. The main volume of the ebb tidal current runs S through the W channels connecting the straits.

In Rosario Strait, the main E channel, the flood current has almost twice the duration of the ebb; and in Haro Strait and Boundary Pass, the main W channel, the ebb current normally is much stronger than the flood. The tidal currents set fairly through the main channel of Haro Strait from the S entrance to Turn Point.

In Boundary Pass, the flood current from Rosario Strait is felt as soon as the passage between Orcas Island, located 2 miles NE of San Juan Island, and the Sucia Islands is open. This current is apt to set vessels towards East Point, on Saturna Island. The ebb current in Boundary Pass will be observed setting E, even before vessels have proceeded well into the Strait of Georgia. During its strength, the flood current usually flows through the middle of Boundary Pass toward Patos Island.

**Caution.**—On passing through Boundary Pass into the Strait of Georgia, vessels should be aware of the Traffic Separation Schemes (TSS) existing in the strait which may best be seen on the chart.

## Channels West of Haro Strait—Cordova Bay to Sydney

**2.9 Cordova Bay** (48°31'N., 123°20'W.), lying about 6 miles N of Victoria, indents the E end of Vancouver Island, between Gordon Head and Cowichan Head, 4.5 miles NNW. The latter head is backed by conspicuous white cliffs.

The shore of this open bay is mostly foul and the tidal currents are weak and variable. Anchorage, open to the SE, can be taken, in depths of 14 to 17m, good holding ground, about 1 mile NNW of Gordon Head.

Johnstone Reef, lying about 1.5 miles SE of Gordon Head, dries and is marked by a buoy.

Zero Rock, marked by a light, lies about 2 miles NNE of Gordon Head. This rock dries and several shoal pinnacles lie within about 0.5 mile of it. Little Zero Rock, lying about 1 mile WNW of Zero Rock, dries and is steep-to on its E side.

Numerous shoal pinnacles extend up to about 0.5 mile WNW of this rock and are marked by a lighted buoy.

D'Arcy Island, lying 2.5 miles N of Zero Rock, is wooded. A light is shown from a structure standing at the W side of this island. Shoals lie up to about 0.8 mile NW of the island and are marked by a lighted buoy. Fairway Patch, with a depth of 9.1m, lies about 0.8 mile SW of this island.

**James Island** (48°36'N., 123°21'W.) lies on sandy shoals which extend, as James Spit, SSE for 2.3 miles. The S side of this wooded island is formed by high, conspicuous white cliffs. The SW end of these cliffs is located about 2 miles NNE of Cowichan Head and 1 mile SE of Cordova Spit.

A sandy islet lies on a drying spit about 0.5 mile NNW of the SW extremity of James Island. A water tower and a tall chimney stand on high ground NE of this islet.

A light is shown from a structure standing on the NW extremity of James Island. A wharf, situated at the E side of the island, is 37m long and has a depth of 6m alongside. It is used for loading explosives.

**Cordova Channel** (48°34'N., 123°21'W.) leads between James Island, Cordova Spit, and Vancouver Island. This channel is not as wide or deep as Sidney Channel, which is preferred. Cordova Channel should not be used at night or during times of poor visibility. A least depth of 10.5m lies in the channel, about 1.3 miles E of Cowichan Head.

**Saanichton Bay** (48°36'N., 123°23'W.) lies between Cordova Spit and Turgoose Point, about 0.8 mile WNW. Sheltered anchorage, in a depth of 18m, good holding ground, can be taken in the entrance. Mount Newton rises 3 miles WNW of Cordova Spit. This hill forms a conspicuous landmark; two towers stand on it. An aeronautical light is situated at the airport, about 2 miles NNE of this hill.

**Tides—Currents.**—The tidal currents in Cordova Bay and Cordova Channel vary in direction and velocity. In Colburne Passage, the tidal current attains a velocity of 2 knots. In Moresby Passage, the tidal current attains a velocity of 2 to 3 knots.

At Turn Point, the flood current divides, with part of it flowing NW through Prevost Passage and Swanson Channel. The weaker part sets NE towards Boundary Pass. To the S of Turn Point, minor branches of the current flow NE through the various channels and E through Spieden Channel.

**Caution.**—A torpedo firing area is situated in the N part of Cordova Bay.

Several submarine cables, which may best be seen on the chart, lie across Cordova Channel, between Cordova Spit and James Island.

**2.10 Sidney Channel** (48°37'N., 123°20'W.), with a least depth of 14.6m, leads between James Island and Sidney Island.

Munroe Rock, lying about 0.5 mile off the SW extremity of Sidney Island, is an unmarked danger.

Vessels should enter the channel from a position about 3.5 miles NE of Seabird Point (48°25'N., 123°13'W.) and steer a course of 318°. This course leads though the fairway between Zero Rock and Kelp Reefs. When Zero Rock Beacon bears 199°, vessels should change course to 327° and pass between D'arcy Shoals and a shoal patch, with a depth of 6.4m, lying NW of D'arcy Island. Vessels should continue to steer 327° until abeam of the light situated off the NW extremity of James

Island. They should then steer a course of 357°, clearing Sidney Spit, if bound for Moresby Passage. If bound for Sidney, vessels should steer 322° for a distance of 1.5 miles and then steer a W direction towards the Government Wharf.

An alternate approach to Sidney lies between Zero Rock and Little Zero Rock. After passing these rocks, Cadboro Point and Zero Rock Light in line astern, bearing 165°, leads between D'arcy Shoals and James Spit.

**Sidney** (48°39'N., 123°23'W.) ([World Port Index No. 18660](#)) lies 3.5 miles N of Saanichton Bay.

Victoria International Airport is situated 1.3 miles W of Sidney.

An automobile ferry plies from a landing, situated 0.4 mile SSW of the public wharf, to Anacortes, Washington. There is a least ; however, berthing is difficult during SE winds.

A submarine pipeline extends about 0.4 mile seaward, close NE of the ferry landing. Several radio towers stand close W of the ferry landing and the approach to it is indicated by a range. A marina is situated close N of the public wharf.

Anchorage can be taken, in depths of 15 to 18m, mud and sand, about 0.5 mile S of the public wharf and 0.5 mile offshore.

## Sidney Channel to Moresby Passage

**2.11** Sidney Channel, from its N continuation at Sidney Spit (48°39'N., 123°21'W.), leads N to Moresby Passage (48°44'N., 123°21'W.), between numerous islets and rocky shoals.

Tsehum Harbor, entered 2.5 miles NW of Sidney Spit, is a small craft harbor containing several marinas. Above and below-water rocks clutter this harbor and it should not be entered without local knowledge.

**Little Group** (48°40'N., 123°22'W.), consisting of several islets and rocks connected by foul ground, lies on the W side of the fairway that leads N from Sidney Channel. Dock Islet, marked by a light, is the easternmost islet of this group.

**Sunk Rock** (48°40'N., 123°21'W.), with a least depth of 5.5m, lies on the E side of the fairway and about 0.5 mile ESE of Dock Islet. Several detached foul patches lie between this rock and Forrest Island, which is located 0.8 mile ESE of Dock Islet and 0.3 mile N of Sunken Spit Light.

Forrest Island, lying at the N end of Miners Channel, is surrounded by drying reefs. A light is shown from a structure standing on the S end of this island.

**2.12 Imrie Island** (48°42'N., 123°20'W.) is very small and encircled by foul ground. A rocky patch, which is marked by kelp in summer and autumn, lies about 0.5 mile WSW of the island. This patch has a depth of 5.8m and the foul ground extends up to it. The fairway extending to Moresby Passage leads, in a least depth of 16.5m, about 0.3 mile W of this rocky patch.

**Charmer Point** (48°41'N., 123°22'W.), the E extremity of Coal Island, is located 0.5 mile W of the fairway.

**Greig Island** (48°41'N., 123°20'W.), a bare rock, is located 0.8 mile ENE of Dock Islet and lies on foul ground at the E side of the fairway. Reay Island, a rocky ridge, lies about 0.5 mile NE of this island.

The **Pellow Islets** (48°44'N., 123°21'W.), conspicuous from the N and S, lie about 2.5 miles N of Charmer Point and close E of **Portland Island** (48°44'N., 123°22'W.). A lighted buoy, moored about 0.3 mile SE of these islets, marks the E side of a shoal with a least depth of 4.6m. The foul ground encircling the islets extends into Moresby Passage.

**Turnbull Reef** (48°44'N., 123°21'W.), the N extension of the foul ground extending E from Portland Island, has rocky heads with depths of less than 1.8m. Kelp, marking this reef during the summer, is often submerged by the strong tidal currents.

**2.13 Seymour Point** (48°43'N., 123°20'W.), the W extremity of Moresby Island, is located 1.5 miles N of Imrie Island. From Reynard Point, the NW extremity of Moresby Island, foul ground and drying rocks extend up to about 0.5 mile WNW into Moresby Passage. These dangers terminate at Canoe Rock, which is marked by a light. A shoal, with a depth of 8.2m, lies in the middle of Moresby Passage, about 0.3 mile NW of Canoe Rock.

Small vessels with local knowledge can anchor, in a depth of 14.6m, between Reynard Point and Seymour Point.

**Prevost Passage** (48°42'N., 123°19'W.) leads W from Haro Strait and passes close S of Moresby Island. It joins Moresby Passage and Shute Passage to the N and W, respectively. The N side of this passage should be favored as the S side is bounded by numerous islets, rocks, and reefs.

**Shute Passage** (48°43'N., 123°24'W.) leads W into **Satellite Channel** (48°42'N., 123°29'W.), between Portland Island and **Piers Island** (48°42'N., 123°25'W.).

**Celia Reefs** (48°43'N., 123°23'W.) lie on the N side of this passage and rocky, foul ground lies on the S side. The fairway is deep and clear of dangers. Knapp Island is located 0.3 mile SE of Piers Island. A channel, marked by lighted buoys, leads between these islands.

**Colburne Passage** (48°42'N., 123°24'W.), a constricted waterway, is entered close N of Coal Island and leads W into Satellite Channel. The fairway passes between numerous dangers which are marked by lights and lighted buoys.

## Swanson Channel and Plumper Sound

**2.14 Swanson Channel** (48°45'N., 123°18'W.) leads NW from Haro Strait between Moresby Island and North Pender Island.

**Mouat Point** (48°47'N., 123°19'W.), steep-to and cliffy, is the SW extremity of North Pender Island. Between this point and **Beaver Point** (48°46'N., 123°22'W.), the channel extends N to Active Pass and forms an alternate fairway to the Strait of Georgia.

Swanson Channel is deep and uncluttered between **Wallace Point** (48°44'N., 123°14'W.) and Stanley Point, the SE and NW extremities of North Pender Island. High cliffs face the shore of the island and Cramer Hill, a central eminence, is conspicuous.

**Otter Bay** (48°48'N., 123°19'W.) indents the coast of North Pender Island, close S of **James Point** (48°49'N., 123°20'W.). This bay affords temporary anchorage, in depths of 13 to 17m, mud, in its outer part. Several conspicuous tanks stand on the N side of this bay.

Anchorage can also be taken, in depths of 20 to 27m, within a small bay lying close N of Mouat Point. Several conspicuous tanks stand on the E shore of this small bay.

**Port Washington** (48°49'N., 123°19'W.), a settlement, stands at the head of **Grimmer Bay** (48°49'N., 123°20'W.). There is a government ferry wharf, with depths of 4.5m to 5.8m alongside. Pleasure craft berth alongside floats. A beacon, with a red triangular topmark, marks the outer end of the above and below-water rocks that extend from the E shore of the bay.

**2.15 Prevost Island** (48°50'N., 123°22'W.) lies at the NW end of Swanson Channel; **Point Liddell** (48°49'N., 123°22'W.) forms its S extremity.

A reef, extending about 0.3 mile SE of Point Liddell, has a drying rock located at its outer end. A circular tower stands on this rock.

Ellen Bay and Diver Bay indent the E side of Prevost Island, NE of Point Liddell. Red Islets front the point that separates these two bays. Anchorage, open to SE winds, can be taken, in a depth of 18m, within Ellen Bay and, in a depth of 13m, within Diver Bay.

**Portlock Point** (48°50'N., 123°21'W.), marked by light, is the NE extremity of Prevost Island. Swanson Channel leads N between this point and Stanley Point, located about 1 mile SE.

**Tides—Currents.**—In Swanson Channel and Plumper Sound, the flood current sets NW. From the N end of Swanson Channel, a branch sets E through Navy Channel. Off Hope Bay, these currents meet and form tide rips. They then flow N and enter the Strait of Georgia through the narrow channels at either end of Samuel Island. The ebb current sets in the reverse direction. The tidal current in the fairway of Plumper Sound attains a maximum of 3 knots.

At the E end of Navy Channel, the maximum velocity of the flood current is 2 to 3 knots; the maximum velocity of the ebb current is 1 to 2 knots.

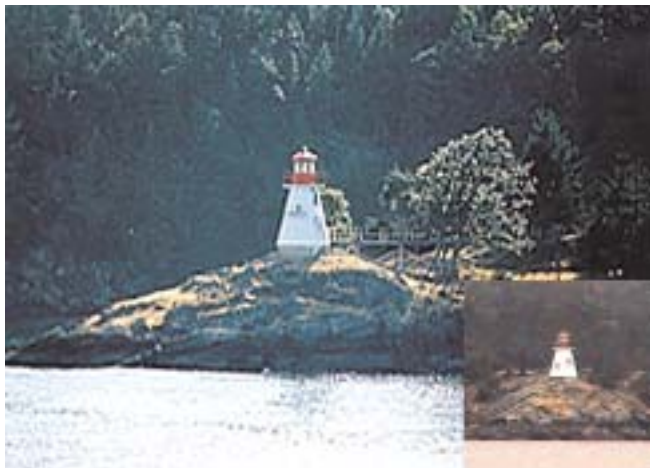
The velocity of the tidal currents in the S entrance of Active Pass, off Matthews Point, is 5 to 7 knots at springs and 3 to 5 knots at other times. The velocity of both tidal currents in the N entrance is 4 to 5 knots at springs. Heavy freshets from the Fraser River often increase the velocity of the S tidal current.

**Caution.**—Several submarine cables, which may best be seen on the chart, lie across Swanson Channel, from close N of Beaver Point to close N of Pender Island.

The approach to the settlement of Port Washington is a water aerodrome.

**2.16 Plumper Sound** (48°47'N., 123°13'W.) is entered from Haro Strait between South Pender Island and Saturna Island. It leads NW into Navy Channel and the approach to Active Pass. The sound has a least depth of 21.9m in the fairway and is clear of dangers. Rocky patches lying close to the shore are often marked by kelp.

Recommended anchorage lies in depths of 18 to 22m along the N side of South Pender Island. Vessels should moor about 2 miles within the entrance of the sound and about 0.3 mile offshore. About 2 miles within the entrance, the depths decrease quite suddenly to 18m and excellent anchorage may be obtained almost anywhere.



Main photo copyright Mike Mitchell

### Portlock Point Light

**Port Browning** (48°46'N., 123°13'W.), an inlet with a general depth of 9m, indents the SE coast of North Pender Island. Several rocky, shoal patches lie within this inlet and some drying rocks, marked by a buoy, front **Razor Point** (48°46'N., 123°14'W.), the E entrance point. Anchorage can be taken, in a depth of 8.8m, mud, about 0.4 mile from the head of the inlet.

**Croker Point** (48°46'N., 123°12'W.), the SW extremity of Saturna Island, is located 1.5 miles E of Razor Point. The coast between this point and Taylor Point, 3 miles ESE, is formed by high, steep, and wooded cliffs. A detached rocky patch, with a depth of 4m, lies at the edge of the fairway, about 0.3 mile NW of Croker Point. The NE extremity of North Pender Island bearing 310° and open S of **Fane Island** (48°48'N., 123°16'W.), which is marked by a light, leads W of this rocky patch.

**Hope Bay** (48°48'N., 123°17'W.) ([World Port Index No. 18650](#)), a cove, lies close W of Fane Island. Several islets and below-water rocks lie between the island and the shore. A government pier extends from the SW side of the bay. It is about 220m long and has depths of 5.5 to 10m alongside.

Anchorage can be taken, in depths of 13 to 16.5m, mud, in the entrance to the bay, S of Fane Island.

**Caution.**—A submarine cable lies within Port Browning and extends from close NW of Razor Point.

**2.17 Lyall Harbor** (48°48'N., 123°12'W.) ([World Port Index No. 18630](#)) indents the NW side of Saturna Island, between Payne Point and King Islet. Boot Cove is entered from the S side of the harbor. A government ferry pier is situated at the E entrance point and has a depth of 7.9m alongside. Floats moored near this pier and off the N shore of the harbor have a least depth of 5.8m alongside.

Crispin Rock, below-water, lies near the center of the harbor and is marked by a buoy.

Anchorage can be taken, in a depth of 12.8m, mud, within the harbor entrance, W of Crispin Rock. Anchorage can also be taken, in a depth of 11m, mud, about 0.3 mile SE of the rock.

Samuel Island forms the NE side of Plumper Sound and is separated from Saturna Island by **Winter Cove** (48°49'N., 123°12'W.). This latter cove is shoal and foul. Lizard Island lies close off the NW part of Samuel Island and channels leading to the Strait of Georgia pass on either side of it.

## Navy Channel—Active Pass and Approaches

**2.18 Navy Channel** (48°50'N., 123°19'W.) leads WNW from Plumper Sound to a junction with Swanson Channel.

**Mayne Island** (48°51'N., 123°17'W.), lying about 0.5 mile N of North Pender Island, forms the N side of Navy Channel and the E side of Active Pass. A range of very high hills parallels the S shore of this island. A prominent radio tower stands close W of the summit of the island.

**Conconi Reef** (48°50'N., 123°17'W.), marked by a light, is flanked by below-water rocks and reefs. These dangers border the N side of the fairway passing through Navy Channel. The fairway has a least depth of 18.3m.

The W entrance of Navy Channel lies between **Dinner Point** (48°50'N., 123°19'W.), the SW extremity of Mayne Island, and Stanley Point, about 1 mile S. Several above-water rocks lie close off Dinner Point.

**Village Bay** (48°51'N., 123°19'W.) indents the coast of Mayne Island between **Crane Point** (48°51'N., 123°20'W.) and Helen Point, 1 mile NNW. Anchorage can be taken, in a depth of 14m, within this bay. The bay is clear of dangers and easy to access.

**Enterprise Reef** (48°51'N., 123°21'W.), which extends for about 0.5 mile, lies in the approaches to Active Pass and about 1 mile NW of Dinner Point. This reef consists of several above and below-water rocky heads, with foul ground lying between them. A light is shown from a structure, with a radar reflector, marking the westernmost head of this off-lying danger. A buoy is moored at the easternmost end of the reef.

**Caution.**—Several submarine cables cross Navy Channel and may best be seen on the chart.

**2.19 Active Pass** (48°52'N., 123°20'W.) is entered from the S between **Helen Point** (48°51'N., 123°21'W.) and Collinson Point, 0.3 mile NW. This pass is deep, tortuous, and navigable over a least width of 0.3 mile.

Helen Point, marked by a light, forms the termination of a thickly-wooded slope, which rises gradually to the summit of Mayne Island.

**Collinson Point** (48°52'N., 123°21'W.), the S extremity of Galiano Island, is steep-to and rocky. A conspicuous mountain backs this point

A drying ledge and several rocky shoal patches lie close NE of Collinson Point. These dangers are marked by a light with a radar reflector.

**Tides—Currents.**—The ebb current in Active Pass runs from the Strait of Georgia and appears to set SSE across the entrance. Near Fairway Bank, the ebb current is often weak and varies in direction, but it sets S at 1 to 2 knots during spring tides.

After passing Laura Point, the main ebb current veers W; its greatest strength is found somewhat to the S of mid-channel, opposite Matthews Point.



*Left photo copyright Mike Mitchell; bottom right photo courtesy of J. Kandik*

### Active Pass Light

Passing over the shoal area lying to the N of Helen Point, the ebb sets across the S entrance, near Collinson Point, and disperses into Trincomali Channel.

On the ebb, a counterclockwise eddy appears in Miners Bay. This eddy may reach a velocity of 2 knots off the pier at Mayne Island with strong tides. An eddy also appears to the W of Helen Point.

The flood current in Active Pass approaches from the S and rapidly gains velocity off Helen Point. Turning E in conformity with the channel, the main current sets close to Matthews Point. From a position 0.2 mile S of Mary Anne Point, it sets ENE as far as Laura Point, where it is deflected NNE and follows close along the E shore. This direction is maintained as far as Fairway Bank, where the influence of the flood in the Strait of Georgia is felt. The current from Active Pass then veers to the NW in the vicinity of Gossip Shoals.

A portion of the flood current turns S from Laura Point and creates a large, clockwise eddy in Miners Bay. Off the pier at Mayne Island, the current reaches a velocity of 2.5 knots. It returns to the main current off Mary Anne Point and causes great turbulence on strong tides. A weaker eddy occurs on the flood to the N of the main current and to the NE of Mary Anne Point. It sets counterclockwise and returns to the main current close off Mary Anne Point.

Off Georgina Point, a weak W current occurs on the flood. At a point midway between Georgina Point and Fairway Bank, the current may set W, or even SW, at a velocity of 1 to 1.5 knots.

Violent rips occur on strong flood tides over an area extending from mid-channel, S of Mary Anne Point, to Laura Point. Strong tide rips also occur near Fairway Bank. They increase in violence when occurring on the ebb tide in Active Pass.

**Caution.**—Active Pass is the main shipping route for coastal trade between the mainland and South Vancouver Island. Large and fast ferries may be encountered within this pass, as well as freighters, coastal tankers, and tugs towing barges.

Tidal currents attaining velocities of up to 5 to 7 knots may be encountered, during strong tides, in the S entrance to Active Pass.

**2.20 Miners Bay** (48°52'N., 123°18'W.) indents the W side of Mayne Island, about midway through Active Pass. This bay is entered between Reserve Point and **Laura Point** (48°52'N., 123°18'W.). A conspicuous church and high hill stand in the vicinity of the latter point. Anchorage can be taken, in a depth of 20m, near the head of the bay and clear of the tidal currents.

**Mayne** (48°51'N., 123°18'W.) ([World Port Index No. 18620](#)), a village, stands at the head of Miners Bay. It is connected by road to Village Bay, where a local ferry service is available. The public wharf fronting the village is in ruins. There is another wharf, 22m long, with a depth of 4m at its head. A seaplane float is attached to this wharf.

**Mary Anne Point** (48°52'N., 123°19'W.), marked by a light, indicates the turning point where Active Pass changes direction abruptly to the N. The pass is somewhat constricted by rocky shoals fringing the coast between this point and Burrill Point, about 0.8 mile N.

**Caution.**—Miners Bay is a sea plane terminal.

**2.21 Sturdies Bay** (48°53'N., 123°19'W.) ([World Port Index No. 18610](#)), a shoal inlet with foul ground covered by kelp, lies adjacent and NW of Burrill Point.

**Georgina Point** (48°53'N., 123°17'W.), the E entrance point, is located at the N end of Active Pass. A light is shown from a tower standing on this point and a flagstaff is situated close E of it. A radiobeacon is situated at the tower.

Georgina Shoals extend N and NE from the point. The sea breaks over part of this shoalbank where the depths are less than 2m.

**Fairway Bank** (48°53'N., 123°18'W.), with a least depth of 9.1m, lies in the N entrance of Active Pass, about 0.5 mile WNW of Georgina Point. Tide rips mark this bank, except at slack water.

**2.22 Gossip Island** (48°53'N., 123°19'W.), lying at the W side of the N entrance to Active Pass, is located 1.3 miles NW of Georgina Point. Foul ground almost encircles this island. A boat passage leads from the NW part of the island, clear of the

**Lion Islets** (48°54'N., 123°20'W.), to Whaler Bay. Heavy tide rips occur in the vicinity of the island on the Strait of Georgia side.

Gossip Shoals, consisting of numerous above and below-water rocks and reefs, extend SE from Gossip Island. A lighted buoy marks the SE edge of these shoals.

**Caution.**—The lighted buoy marking Gossip Shoals may drag from its mooring with strong N winds and a flood tidal current.

On entering the Strait of Georgia, vessels should be aware of the Traffic Separation Schemes (TSS) existing in this area, which may best be seen on the chart.